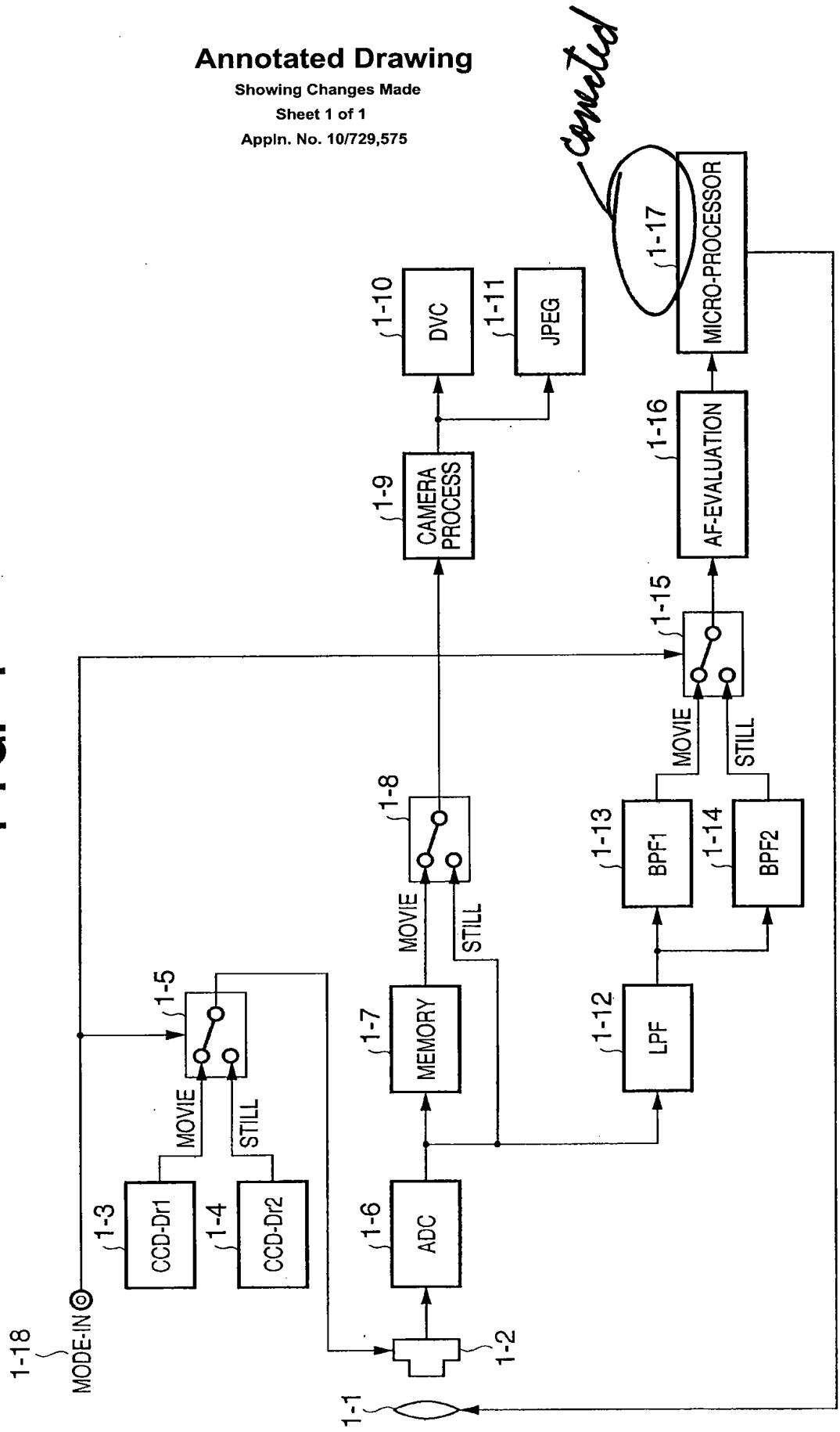
Annotated Drawing

Showing Changes Made

Sheet 1 of 1

Appln. No. 10/729,575

FIG. 1



Remarks

Claims 1, 2 and 3 have been amended. Claims 5-6 have been canceled without prejudice. The specification and drawings have been amended.

Applicant has hereinabove requested that FIG. 1 of the drawings be amended to correct a minor inadvertent error. The Examiner's approval of the drawing change is respectfully requested.

The Examiner has objected to the disclosure as containing minor errors. Applicant has amended the disclosure as above set forth, thereby obviating this objection.

The Examiner has also objected to claim 4 as containing informalities. Claim 4 has been canceled, thereby overcoming this objection.

The Examiner has rejected applicant's claims 1, 2, 4 and 6 under 35 USC 102(b) as being anticipated by the Mizoguchi patent (US Patent No. 6,342,922). The Examiner has also rejected applicant's claims 1, 3 and 5 under 35 USC 102(b) as being anticipated by the Ohta reference (US Patent Application Publication No. 2002/0080258). With respect to applicant's claim 1, as amended, and its respective dependent claims, these rejections are respectfully traversed.

Applicant's claim 1 has been amended to better define applicant's invention. More particularly, amended claim 1 recites an autofocus apparatus for performing a focusing operation using a frequency component of a video signal, comprising: a cutting unit adapted to cut out the video signal; an interpolating unit adapted to interpolate the video signal; an extracting unit adapted to extract a frequency component of a prescribed band in the video signal; and a changing unit adapted to change the band of the frequency component

extracted by said extracting unit, where the video signal is not only cut out by said cutting unit but is interpolated by said interpolating unit.

Such a construction is not taught or suggested by the cited art of record. More particularly, the Mizoguchi patent discloses an image pick-up apparatus having normal and high resolution modes. In particular, in the Mizoguchi patent different high pass filters are used in the high and normal resolution modes for extracting a signal used for autofocus control. In this way optimum focus control is realized for the different modes.

However, the Mizoguchi patent fails to teach or suggest changing the band of a frequency component which is extracted by an extracting unit, where the video signal is not only cut out by a cutting out unit but is also interpolated by an interpolating unit. Applicant's amended claim 1, and its respective dependent claims, in reciting "a cutting unit adapted to cut out the video signal; an interpolating unit adapted to interpolate the video signal; an extracting unit adapted to extract a frequency component of a prescribed band in the video signal; and a changing unit adapted to change the band of the frequency component extracted by said extracting unit, where the video signal is not only cut out by said cutting unit but is interpolated by said interpolating", thus patentably distinguish over the Mizoguchi patent.

The Ohta reference discloses an automatic focusing device which utilizes a bandpass filter having programmable digital filters. An operator causes values to be set for the digital filters depending upon the selection by the operator of a normal mode, a high contrast mode or a low contrast mode. Auto focus evaluation signals are filtered through the band pass with the frequency band determined by the set values. The Ohta reference also discloses changing the pass band of a programmable digital filter in accordance with a zooming operation of an imaging lens. Finally, the Ohta reference mentions using only those evaluation signals which

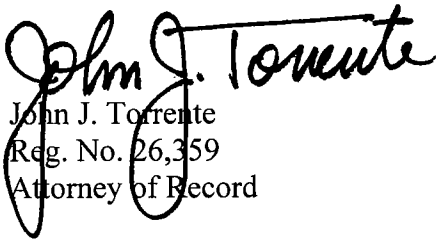
are obtained from a limited area of the photographic image.

However, like the Mizoguchi patent , the Ohta reference fails to teach or suggest changing the band of a frequency component which is extracted by an extracting unit, where the video signal is not only cut out by a cutting out unit but is also interpolated by an interpolating unit. Applicant's amended claim 1, and its respective dependent claims, in reciting "a cutting unit adapted to cut out the video signal; an interpolating unit adapted to interpolate the video signal; an extracting unit adapted to extract a frequency component of a prescribed band in the video signal; and a changing unit adapted to change the band of the frequency component extracted by said extracting unit, where the video signal is not only cut out by said cutting unit but is interpolated by said interpolating", thus patentably distinguish over the Ohta reference.

In view of the above, it is submitted that applicant's claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

Dated: July 20, 2007

Respectfully submitted,



COWAN, LIEBOWITZ & LATMAN, P.C.
1133 Avenue of the Americas
New York, New York 10036-6799
T: (212) 790-9286

John J. Torrente
Reg. No. 26,359
Attorney of Record